## **Health Officer Report for Medical Providers**

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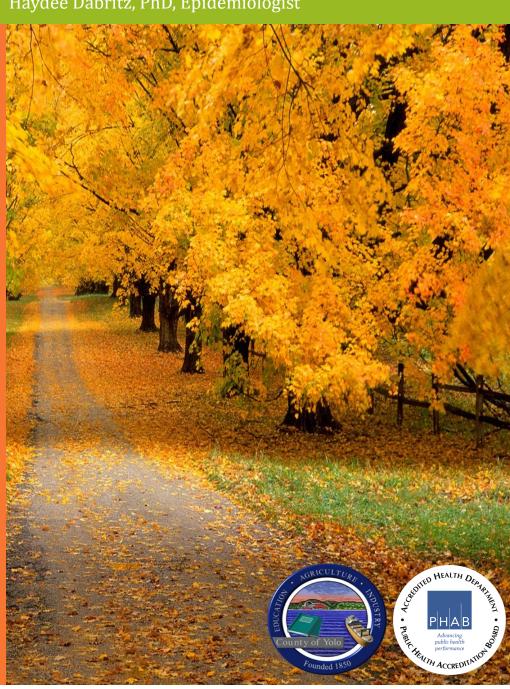
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## YOLO COUNTY

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**FALL 2019** 

## VAPING-ASSOCIATED PULMONARY INJURY

### What to Know

As of September 2019, about 100 cases were reported of severe pulmonary disease associated with the use of vaping products throughout California (over 800 cases across 46 states; 12 deaths (2 in California)). The investigation has not identified a specific cause of the outbreak. Most patients have reported using vaping products that contained cannabinoids (ie. THC or CBD), although nicotine products have been reported as well.

Symptoms typically develop over days to weeks. All cases in California have required hospitalization; most required supplemental oxygen, high-flow oxygen, or bi-level positive airway pressure (BiPAP). However, 30% of people hospitalized developed respiratory failure requiring mechanical ventilation. The median age is 27 years (range: 14-70).

## What to Do

- The California Department of Public Health (CDPH) urges people to avoid use
  of all vaping products while the investigation is ongoing, regardless of
  whether or not it is a licensed product.
- Maintain high clinical suspicion for VAPI as it is a diagnosis of exclusion.
- Report suspected cases to the health department within 1 business day.
- For suspected cases, ask about:
  - Type of Vape used (nicotine- or cannabis-containing products).
  - Amount of use (frequency, last use, duration).
  - Source (where product was purchased).
- Determine if any remaining product, including devices and liquids are available for testing, which can be coordinated with the health department and CDPH.
- There is no available treatment for VAPI.
   Physicians have trialed steroids with a
  possible benefit; there is no recommendation
  on dosing, duration, or route from the CDPH
  or CDC.
- Ask all patients who report vaping product use within the last 90 days about signs and symptoms.

#### Who Should Know

Primary Care, Urgent Care and Emergency Departments, Hospitalists, Intensivists, Pulmonologists, ID Specialists.

# Case Definition of VAPI

- Respiratory illness requiring hospitalization
- 2) History of vaping or dabbing within 90 days of symptom onset
- Pulmonary infiltrates or opacities on chest radiograph or chest CT
- 4) Clinical presentation is not explained by infectious or other alternate etiology

## **Hospital Presentation**

## **Signs and Symptoms**

- ⇒ Respiratory (cough, shortness of breath, or chest pain)
- ⇒ Occasional GI (nausea, vomiting, or diarrhea)
- ⇒ Constitutional (fever, fatigue, body aches)
- ⇒ Hypoxia
- ⇒ Systemic inflammatory response syndrome (SIRS)

## **Laboratory Findings**

- ⇒ Non-specific laboratory abnormalities, including elevated WBC, transaminases, procalcitonin, and inflammatory markers
- ⇒ Negative infectious disease testing (influenza, respiratory viral panel, cultures, etc.)

## **Imaging** (abnormalities are typically bilateral)

- ⇒ Chest X-Ray: pulmonary infiltrates or opacities
- ⇒ Chest CT: ground-glass opacities

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## RATES OF CHLAMYDIA AND GONORRHEA ON THE RISE

#### What to Know

Chlamydia cases in Yolo County, as well as California, continue to increase at staggering rates. Thus far in Yolo County in 2019, there have been over 800 reported cases. In 2018, cases nearly doubled since 2011 to almost 1100 per year. Females are twice as likely as males to be diagnosed and 28% of cases are men who have sex with men (MSM). Rates of infection are highest for people between the ages of 15-29 years (see Figure 1) and among Blacks, Hispanics, and American Indian/Alaska Natives.

Similarly, gonorrhea cases increased fivefold since 2011 with nearly 275 cases in 2018. In 2019, there have

been nearly 250 reported cases to date. The highest rates of gonorrhea are in people between the ages of 20-34 years. Rates are much higher among Blacks compared to all other race/ethnicities (see Figure 2). Gonorrhea rates are highest in West Sacramento, followed by Woodland and Davis.

## What to Do

- Address health disparities by increasing GC/CT screening as well as education regarding testing, treatment, and prevention.
- All women under 25 and older women with risk factors (ie. new or multiple sex partners or having a sex partner with an STD) need testing every year for both GC/CT.
- Implement Expedited Partner Therapy (EPT) for GC/ CT, which is the clinical practice of treating sex partners of patients diagnosed with a treatable STD without the healthcare provider first examining the partner. EPT is allowable in California via <u>California</u> <u>Health and Safety Code § 120582</u>.
- For partners unlikely to seek medical treatment, the best alternative treatment for gonorrhea via EPT is dual treatment with cefixime and azithromycin.
- EPT for gonorrhea among men who have sex with men (MSM) should not be a first-line strategy for partner treatment given the emergence of cephalosporin-resistant gonococcal isolates, particularly among MSM.

### **Who Should Know**

Primary Care, Emergency Departments, OB/Gyn, Pediatric and Adolescent/Young Adult Providers.

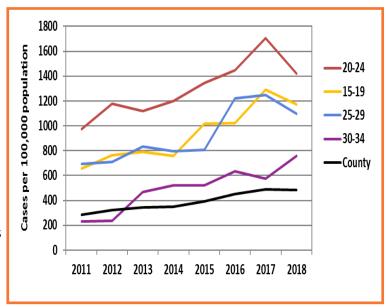


Figure 1. Trends in Chlamydia Rates by Age, Yolo County, 2011-2018

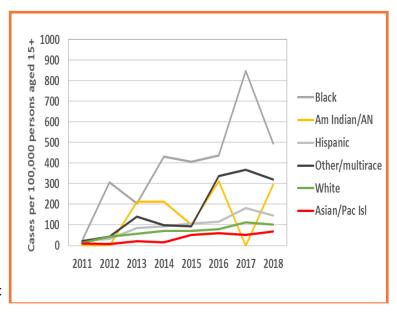


Figure 2. Trends in Gonorrhea Rates by Race/Ethnicity, Yolo County, 2011-2018

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## SYPHILIS RATES ARE ALSO ON THE RISE

### What to Know

**Syphilis cases** are increasing at alarming rates in Yolo County (see figure 3). Thus far in 2019, there have been over 30 cases of early syphilis (primary and secondary) and 30 cases of late syphilis (late latent or unknown duration). In 2018, Yolo County saw its first 2 cases of congenital syphilis in nearly a decade. Among the cases of pregnant women with syphilis, many of the women experienced unstable housing and substance use. There are

## High risk populations include:

- MSM
- People between the ages of 20-30 years
- People experiencing homelessness
- People with substance use
- People who are incarcerated
- Women who are pregnant

notable health disparities with much higher rates of syphilis among Blacks compared to Whites (4 times higher). When evaluating by sex partner, MSM make up about 70% of cases.

In December 2018, Yolo County formed a Syphilis Taskforce composed of providers from CommuniCare, Dignity Health, UC Davis, Sutter Medical Foundation, Fourth and Hope, Progress House Inc, as well as other county and city departments that work closely with high-risk populations. To date, the Syphilis Taskforce has focused on introducing rapid syphilis testing to increase the number of patients screened for syphilis. Additionally, the Taskforce is hoping to improve coordination of care between the local health department and medical providers. Expected roll-out date for the use of rapid syphilis testing in the field is Fall 2019.

### What to do

- Syphilis screening should be offered to all high-risk groups at each healthcare encounter.
- All pregnant women should be screened for syphilis at their first prenatal visit; additional testing between 28-32 weeks and at delivery if they are at high risk for syphilis.
- Syphilis increases both transmission and acquisition of HIV; thus, all patients diagnosed with syphilis should be tested for HIV.
- Adequate treatment is dependent on the stage and should be based on <u>CDC treatment guidelines</u>.
- All pregnant women without prenatal care should receive a STAT RPR at delivery.
- Timely treatment of pregnant women is of the utmost importance to prevent congenital syphilis.
- All sex partners of pregnant women with syphilis should be evaluated clinically and serologically; treatment based on contact management guidelines.

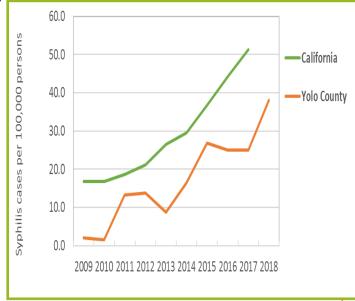


Figure 3. Syphilis Rates, Yolo County vs California, 2009-2018

### Who should know

Primary Care providers, Emergency Departments, OB/Gyn, Pediatricians, ID Specialists.

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## Get Ready for Flu Season 2019-2020

### What to know

The official start of the 2019-2020 influenza season was September 29, 2019. During the 2018-2019 influenza season, there were 12 confirmed influenza-associated pediatric deaths among children <18 years of age and over 600 influenza deaths overall in California. There was a total of 240 confirmed influenza outbreaks in California. Based on the predominant influenza strains during the 2018-2019 season, this year's influenza vaccine composition for the trivalent vaccine will include influenza A (H1N1), influenza A (H3N2-like virus) and influenza B strain. The quadrivalent vaccine will contain these three with an additional influenza B



strain. The CDC recommends a yearly flu vaccine for everyone 6 months of age and older. In Yolo County, healthcare workers who decline vaccination or are unable to provide evidence of vaccination will be required to wear a surgical mask while working in patient care areas from **November 1**, **2019-March 31**, **2020**.

As of October 1, 2019, an important change to Title 17 section 2500 of the California Code of Regulations is that mandatory reporting of influenza-associated deaths in laboratory-confirmed cases by healthcare providers to local health departments is now only for people less than 18 years of age (the previous mandate was for all people ages 0-64). The updated list of reportable diseases can be found at the <u>Division of</u>

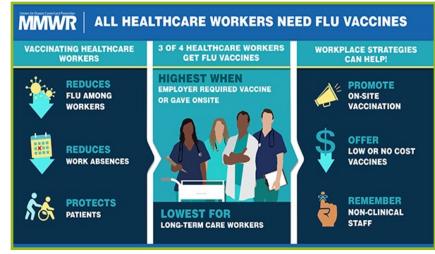
**Communicable Disease Control.** 

### What to do

- Encourage all patients to get their annual flu shot, including patients at high risk of complications (patients <5 or ≥65 years, with comorbidities, and who are pregnant).
- All healthcare providers should get an annual flu shot to protect themselves, their families, and their patients.
- When testing for influenza, specimens should be collected within 24-72 hours, but no later than 5 days after onset of symptoms.
- Antiviral treatment is recommended as early
  as possible for anyone with confirmed or suspected influenza who is hospitalized, has severe, complicated,
  or progressive illness, or is at high risk for complications.
- Antiviral treatment can be considered for any previously healthy, symptomatic patient not at high risk for
  influenza complications based on clinical judgement and if treatment can be initiated within 48 hours of
  illness onset.

#### Who should know

All healthcare providers.

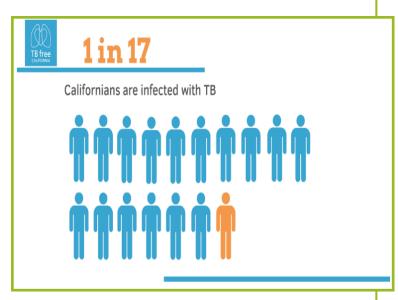


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## **Tuberculosis and Pregnancy**

### What to know

Tuberculosis (TB) poses a greater risk to the pregnant woman and her baby if left untreated. Babies born to mothers with untreated TB disease are at risk of lower birth weight. Fortunately, it is rare for a baby to be born with TB. To make the diagnosis of TB, a tuberculin skin test or TB blood test and a chest x-ray are necessary. Pregnant women can be counseled on the safety of chest x-rays during pregnancy, noting that the amount of radiation to the fetus is small and considered safe. Pregnant women who are diagnosed with active TB disease should start treatment as soon as TB is detected. For pregnant women diagnosed with latent TB infection (LTBI), immediate treatment during pregnancy should be considered if the



woman is a recent TB contact or has HIV/AIDs. In the absence of risk factors, treatment for LTBI can start after a woman has delivered. Antituberculosis medications contraindicated in pregnancy include: Streptomycin, Kanamycin, Amikacin, Capreomycin, Fluoroquinolones. Of note, Pyrazinamide is not used in the US because effects on the fetus are unknown.

Breast feeding is not contraindicated in women being treated with first-line antituberculosis drugs, such as isoniazid (INH) or rifampin (RIF). The concentration of these drugs in breast milk is too small to produce toxicity in the newborn. Additionally, breastfeeding women taking INH should take pyridoxine (vitamin B6) supplementation as well as the breastfed infant. Of note, RIF can cause orange discoloration of body fluids, including breast milk.



1 in 5

Californians born outside of the United States are infected with TB



## What to do

- All suspected and confirmed cases of TB should be reported to the health department.
- Information for pregnant women with questions about TB can be found at the <u>California Department</u> of Public Health.

#### Who should know

OB/Gyn, Primary Care Providers, ID Specialists, Pulmonologists.